DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.15

SOURCE INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** SIR-002124 Address: 333 Burma Road **Date Inspected:** 17-Mar-2010

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Contractor: Location:** Shanghai, China

Quality Control Contact: Don Walter **Quality Control Present:** Yes No **Material transfer:** Yes N/A **Sampled Items:** Yes No No N/A **Stock Transfer:** N/A Yes No OK to Cut: Yes No

N/A **Rebar Test Witness:** N/A N/A Yes No **Delayed/Cancelled:** Yes No

Other:

Bridge No: 34-0006 **Component: OBG** Components

Bid Item: Lot No: B 278

Summary of Items Observed:

On this day CALTRANS OSM Quality Assurance Inspector (QA) S. Manjunath. Math was present during the times noted above for observations relative to the work being performed.

Inspection for Surface Preparation and/or Coating Application.

Cross Beam External Surface Inspection Request No. 2901

A joint three party inspection was performed by ZPMC QC's, ABF QA's and Caltrans QA for the Cross Beam External Surface External Surface for CB5 at Shanghai Zhenhua Port Machinery Co., Ltd., (ZPMC) at Painting workshop no. 1 for Dry Film Thickness (DFT) Check and Residual Chlorides Test.

Inspection Conclusions: Rejected by ABF QA's on North and South Vertical Skin Plates due to painting visual appearance not meeting the requirements and Caltrans QA concurred with the ABF QA's Inspection.

Cross Beam Internal DFT Check Inspection Request No. 2902

A joint three party inspection was performed by ZPMC QC's, ABF QA's and Caltrans QA for the Cross Beam Internal Surface except the Bottom Plate for CB6 at Shanghai Zhenhua Port Machinery Co., Ltd., (ZPMC) at Painting Shop no. 1.

Inspection Conclusions: Rejected by ABF QA's due to Low DFT and Holidays at back side of T-Stiffener and

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Caltrans QA concurred with the ABF QA's Inspection.

OBG Internal Floor Inspection Request No. 2903

A joint three party inspection was performed by ZPMC QC's, ABF QA's and Caltrans QA for the OBG Internal Entire Floor Inspection for Lift 5 West at Shanghai Zhenhua Port Machinery Co., Ltd., (ZPMC) at Port No. 5.

Inspection Conclusions: Rejected by ABF QA's due to Low DFT, Holidays and Caulking not completed and Caltrans QA concurred with the ABF QA's Inspection.

Cross Beam External Inspection Request No. 2904

A joint three party inspection was performed by ZPMC QC's, ABF QA's and Caltrans QA for the Cross Beam External 2 Ends before the external splices assembled for CB5 at Shanghai Zhenhua Port Machinery Co., Ltd., (ZPMC) at Painting Shop no. 1.

Inspection Conclusions: Rejected by ABF QA's as surface preparation not meeting the requirement and Caltrans QA concurred with the ABF QA's Inspection.

Please refer the pictures attached below for more comprehensive details.

Cross Beam External Inspection Request No. 2905

A joint three party inspection was performed by ZPMC QC's, ABF QA's and Caltrans QA for the Cross Beam CB5 and CB6 for External Splices X202D – 4 Nos and X202E – 4 Nos. at Shanghai Zhenhua Port Machinery Co., Ltd., (ZPMC) at Painting Shop no. 1.

Inspection Conclusions: Accepted after minor touch up at bolt holes by ABF QA's and Caltrans QA concurred with the ABF QA's Inspection.

Cross Beam External Inspection Request No. 2906

A joint three party inspection was performed by ZPMC QC's, ABF QA's and Caltrans QA for the Cross Beam External Surface for CB6 at Shanghai Zhenhua Port Machinery Co., Ltd., (ZPMC) at Painting Shop no. 1 for Adhesion Test.

Inspection Conclusions: Accepted as Adhesion results were obtained as 8.2 Mpa and 8.4 Mpa by ABF QA's and Caltrans QA concurred with the ABF QA's Inspection.

Galvanizing Inspection Request No. 2907

A joint three party inspection was performed by ZPMC QC's, ABF QA's and Caltrans QA for the Platform 1 no., Ladder 1 no., Travel Rail Support 132 nos., Splice for handrail – 300 nos. and Handrail – 13 nos. at Shanghai Zhenhua Port Machinery Co., Ltd., (ZPMC) at Galvanizing workshop for Galvanizing.

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Inspection Conclusions: Accepted subjected to minor touch up to damage in assembly after installation by ABF QA's and Caltrans QA concurred with the ABF QA's Inspection.

Galvanizing Inspection Request No. 2908

A joint three party inspection was performed by ZPMC QC's, ABF QA's and Caltrans QA for the Channel GGL-MQ-1491 – 32 nos., and Accessory for the Channels (Item no. 1) GGL-MQ-1521 – 55 nos. at Shanghai Zhenhua Port Machinery Co., Ltd., (ZPMC) at Painting Workshop no. 2 for Degreasing and Cleaning.

Inspection Conclusions: Accepted by ABF QA's and Caltrans QA concurred with the ABF QA's Inspection.

OBG Internal Entire Floor Inspection Request No. 2909

A joint three party inspection was performed by ZPMC QC's, ABF QA's and Caltrans QA for the OBG Internal Entire Floor for Lift 5 West at Shanghai Zhenhua Port Machinery Co., Ltd., (ZPMC) at Ship No. 17 for DFT.

Inspection Conclusions: Rejected by ABF QA's due to Low DFT and Holidays not completed and Caltrans QA concurred with the ABF QA's Inspection.

OBG Internal Entire Floor Inspection Request No. 2910

A joint three party inspection was performed by ZPMC QC's, ABF QA's and Caltrans QA for the OBG Internal Entire Floor from the weld seam to PP 30 and PP 31 for Lift 5 East at Shanghai Zhenhua Port Machinery Co., Ltd., (ZPMC) at the Ship No. 17 for DFT Check.

Inspection Conclusions: Rejected by ABF QA's due to high DFT, Runs and Sags and Unclean surface and Caltrans QA concurred with the ABF QA's Inspection.

Cross Beam Internal Inspection Request No. 2911

A joint three party inspection was performed by ZPMC QC's, ABF QA's and Caltrans QA for the Cross Beam internal surface except the bottom plate for CB6 at Shanghai Zhenhua Port Machinery Co., Ltd., (ZPMC) at the Painting workshop no. 1 for DFT Check.

Inspection Conclusions: Rejected by ABF QA's due to low DFT and holidays and Caltrans QA concurred with the ABF QA's Inspection.

Cross Beam External Inspection Request No. 2912

A joint three party inspection was performed by ZPMC QC's, ABF QA's and Caltrans QA for the Cross Beam external surface for CB6 at Shanghai Zhenhua Port Machinery Co., Ltd., (ZPMC) at the Painting workshop no. 1 for Surface Preparation before applying the final coat.

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Inspection Conclusions: Accepted subjected to cleanliness and blowing down and minor mud cracking rectification before applying the final coat and Caltrans QA concurred with the ABF QA's Inspection.

Galvanizing Inspection Request No. 2913

A joint three party inspection was performed by ZPMC QC's, ABF QA's and Caltrans QA for the Suspender Bracket SB42W, SB44W and SB46W- 3 Sets, Corner Unit assembly Plate X37A – 33 Pieces and Suspender Bracket faying surface shim plates- 10 Nos. at Shanghai Zhenhua Port Machinery Co., Ltd., (ZPMC) at Blasting workshop no. 2 for Surface Preparation, Residual Chlorides test.

Inspection Conclusions: Accepted by ABF QA's after minor grinding and re-blast, Salt test recorded as 20 micro Siemens /cm and Surface profile recorded in range of 78 to 82 microns and Caltrans QA concurred with the ABF QA's Inspection.

Cross Beam Internal Inspection Request No. 2914

A joint three party inspection was performed by ZPMC QC's, ABF QA's and Caltrans QA for the OBG Cross Beam internal and external damaged areas re-blasting, Corner unit internal from PP 37 to PP 40 and Lift 6 East pre-weld seam re-blasting (Lead end internal, tail end external and internal) at Shanghai Zhenhua Port Machinery Co., Ltd., (ZPMC) at the OBG Trail Assembly area for Surface Preparation before primer coat application.

Inspection Conclusions: Accepted and fabrication defects were found asked ZPMC QC to fix them before primer coat application, three surface profile test performed results recorded as 72 microns to 80 microns and Caltrans QA concurred with the ABF QA's Inspection.

OBG External Surface Inspection Request No. 2915

A joint three party inspection was performed by ZPMC QC's, ABF QA's and Caltrans QA for the OBG external surface (Except east side) for Lift East Side at Shanghai Zhenhua Port Machinery Co., Ltd., (ZPMC) at the OBG Assembly Yard for Surface preparation before application of Finish Coat Application.

Inspection Conclusions: Rejected by ABF QA's as mud crack observed at many location touch up by Inter-zinc 52 recommended and Caltrans QA concurred with the ABF QA's Inspection.

Cross Beam Internal Inspection Request No. 2916

A joint three party inspection was performed by ZPMC QC's, ABF QA's and Caltrans QA for the Suspender Brackets SB36W, SB38W, SB40W, SB36E and SB44E at Shanghai Zhenhua Port Machinery Co., Ltd., (ZPMC) at the West Gate of the Blasting workshop for Degreasing and Cleaning.

Inspection Conclusions: Accepted by ABF's QA's and Caltrans QA concurred with the ABF QA's Inspection.

Please refer the pictures attached below for more comprehensive details.

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Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.









Summary of Conversations:

No relevant conversations.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric T Sang 1500-0042-2372, who represents the Office of Structural Materials for your project.

Inspected By:	Math, Manjunath	Quality Assurance Inspector
Reviewed By:	Carreon,Albert	QA Reviewer